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### Patent Claims

- 1) An immunodeficiency virus of the HIV group, or variants of this virus, which exhibits the essential morphological and immunological properties of the retrovirus which has the designation MVP-5180/91 and which has been deposited with the European Collection of Animal Cell Cultures (ECACC) under No. V 920 92 318.
- 2) The immunodeficiency virus as claimed in claim 1, which exhibits a protein band in a Western blot which corresponds to reverse transcriptase and is 3-7 kilodaltons smaller than the corresponding band of the HIV-1 and/or HIV-2 viruses.
- 3) The immunodeficiency virus as claimed in one of claims 1 or 2, which retrovirus exhibits less reactivity with a monoclonal antibody directed against protein p 24, related to reverse transcriptase activity, than does the HIV-1 virus, and more activity, related to the activity of reverse transcriptase, than does HIV-2.
- 4) The immunodeficiency virus as claimed in one of the preceding claims, wherein antigen/antibody reactions with its transmembrane protein gp 41 are readily detectable using sera from patients originating from Africa, and wherein only a relatively small antigen/antibody reaction, or no such reaction, can be detected with the gp-41 using sera from patients originating from Germany.
- 5) The immunodeficiency virus as claimed in one of the abovementioned claims, which has an RNA sequence which is homologous to the extent of about 75% or more, based on the entire genome, with the RNA of the deposited virus.

- 6) The immunodeficiency virus as claimed in one of the abovementioned claims, which has an RNA sequence which is homologous to the extent of at least 75% with the RNA sequence of Table 1.
- 7) The immunodeficiency virus as claimed in one of claims 1 to 5, which has a nucleotide sequence which is homologous to the extent of at least 75% with the sequence of Table 3, or parts thereof.
- 8) The immunodeficiency virus as claimed in claim 7, wherein the part of the sequence is at least 50 nucleotides long.
- 9) The immunodeficiency virus as claimed in one of the preceding claims, which has a sequence or constituent sequence which corresponds to Fig. 4 or is homologous to this sequence, where the differences from the sequence given in Fig. 4, related to the gene loci, are at most: LTR: 17%, GAG: 29%, POL: 25%, VIF: 31%, ENV: 46%, NEF: 16%.
- 10) The immunodeficiency virus as claimed in one of the preceding claims, which has a sequence or constituent sequence which corresponds to Fig. 4 or is homologous to this sequence, where the differences from the sequence given in Fig. 4, related to the gene loci, are at most: LTR: 10%, GAG: 14%, POL: 12%, VIF: 15%, ENV: 22%, NEF: 10%.
- 11) cDNA which is complementary to the RNA, or parts thereof, of the immunodeficiency virus MVP-5180/91 deposited with the European Collection of Animal Cell Cultures (ECACC) under No. V 920 92 318, or of a virus as claimed in one of claims 1-10.
- 12) Recombinant DNA which contains cDNA as claimed in claim 11.

- 13) An antigen which was prepared using the cDNA as claimed in claim 11 or the recombinant DNA as claimed in claim 12, or using the amino acid structure which can be deduced from its cDNA.
- 14) The antigen as claimed in claim 13, which is a protein or peptide.
- 15) The antigen as claimed in one of claims 13 or 14, which has an amino acid sequence which corresponds to Table 3 or to a constituent sequence thereof.
- 16) The antigen as claimed in claim 15, wherein the constituent sequence has at least 10 amino acids.
- 17) The antigen as claimed in claim 15, which has the amino acid sequence RLQALETLIQNQQRNLWGCKGKLICYTSVKWNTS, or a constituent sequence thereof having at least 6 consecutive amino acids.
- 18) An antigen which was prepared from an immunodeficiency virus as claimed in one of claims 1 to 10.
- 19) The antigen as claimed in one of claims 13 to 18, which was prepared recombinantly.
- 20) The antigen as claimed in one of claims 13 to 17, which was prepared synthetically.
- 21) A test kit for detecting antibodies against viruses which cause immuno deficiency, wherein antigen as claimed in claims 13 to 20 is employed.
- 22) The test kit as claimed in claim 21, which is a Western blot.
- 23) The test kit as claimed in claim 21, which is an ELISA test or a fluorescence-antibody detection test.

- 24) Use of the immunodeficiency virus as claimed in one of claims 1 to 10 and/or of the cDNA as claimed in claim 11 or 12 and/or of an antigen as claimed in claims 13 to 20 for detecting retroviruses which cause immune deficiency.
- 25) Use of a retrovirus as claimed in one of claims 1 to 10, of a cDNA as claimed in claim 11 or 12 and/or of an antigen as claimed in claims 13 to 20 for preparing vaccines.
- 26) Ribonucleic acid characterized in that the ribonucleic acid is coding for an immunodeficiency virus according to one of claims 1 to 10.
27. A nucleic acid comprising the sequence of the genome of virus MvP-5180/91 (SEQ ID NO:56).
28. The nucleic acid of claim 27, wherein said nucleic acid is DNA.
29. The nucleic acid of claim 27, wherein said nucleic acid is RNA.
30. A nucleic acid comprising the sequence of SEQ ID NO:38 or SEQ ID NO:39.
31. A nucleic acid comprising the sequence of SEQ ID NO:44 or SEQ ID NO:45.

32. A nucleic acid comprising a nucleotide sequence having more than 66% homology with SEQ ID NO:44 or SEQ ID NO:45, over the length of SEQ ID NO:44 or SEQ ID NO:45, respectively.
33. The nucleic acid of claim 32, wherein said nucleic acid comprises a nucleotide sequence having more than 75% homology with SEQ ID NO:44 or SEQ ID NO:45, over the length of SEQ ID NO:44 or SEQ ID NO:45, respectively.
34. The nucleic acid of claim 33, wherein said nucleic acid comprises a nucleotide sequence having more than 85% homology with SEQ ID NO:44 or SEQ ID NO:45, over the length of SEQ ID NO:44 or SEQ ID NO:45, respectively.
35. A nucleic acid comprising a nucleotide sequence having more than 66% homology with SEQ ID NO:37 or SEQ ID NO:38, over the length of SEQ ID NO:37 or SEQ ID NO:38, respectively.
36. The nucleic acid of claim 35, wherein said nucleic acid comprises a nucleotide sequence having more than 75% homology with SEQ ID NO:37 or SEQ ID NO:38, over the length of SEQ ID NO:37 or SEQ ID NO:38, respectively.
37. The nucleic acid of claim 36, wherein said nucleic acid comprises a nucleotide sequence having more than 85% homology with SEQ ID NO:37 or SEQ ID NO:38, over the length of SEQ ID NO:37 or SEQ ID NO:38, respectively.

38. A nucleic acid comprising at least 50 consecutive nucleotides of SEQ ID NO:56.

39. The nucleic acid of claim 38, said nucleic acid comprising at least 100 consecutive nucleotides of SEQ ID NO:56.